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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,676	03/29/2004	Byung Chul Ahn	8733.1044.00-US	1169
30827	7590	03/07/2006	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP			TON, MINH TOAN T	
1900 K STREET, NW			ART UNIT	
WASHINGTON, DC 20006			PAPER NUMBER	
			2871	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No.	Applicant(s)	
	10/810,676	AHN ET AL.	
	Examiner	Art Unit	
	Toan Ton	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 3,7-9 and 20-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restriction

1. An election without traverse of species Ia2 is acknowledged. Thus, claims 1-2, 4-6 and 10-19 are being examined. Claims 3, 7-9 and 20-37 are withdrawn from consideration.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-6 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 2002/0051110).

Kim discloses a liquid crystal display of horizontal electric field applying type, which comprises (see at least Figures 6, 8): a thin film transistor array substrate, comprising: a gate line; a common line parallel to the gate line; a data line crossing the gate line and the common line with a gate insulating film therebetween to define a pixel area; a thin film transistor formed on each intersection of the gate line and the data line; a pixel electrode (e.g., 82) connected to the thin film transistor; a gate pad (e.g. 84) formed with at least one conductive layer included in the gate line; a data pad (e.g., 86) formed with at least one conductive layer included in the data line; a common pad formed with at least one conductive layer included in the common line; a passivation film exposing the gate pad, the data pad and the common pad, which are formed on a substrate to form the thin film transistor array substrate; a color filter array (see at least [0026])

Art Unit: 2871

combined with the thin film transistor array substrate, liquid crystal material being filled between the color filter and the thin film transistor array substrate; and a conductive film (e.g., ACF 250) connected to the gate pad, the data pad, said pads exposed on the thin film transistor array substrate.

The use of an in-plane-switching field LCD device comprising a common electrode/line and the pixel electrode formed on the same substrate (thereby yielding a horizontal field) is common and known in the art for achieving advantages such as wide viewing angle. Therefore, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ a common electrode and the pixel electrode formed on the same substrate (thereby yielding a horizontal field), as common and known in the art for achieving advantages such as wide viewing angle.

Kim discloses the contact holes formed at the insulating /passivation layer/film while exposing the common pad(s) (see at least [0025]). Further, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ a conductive film (e.g., ACF 250) connected to the common pad for achieving advantages such as reinforcing adhesion while saving manufacturing cost.

Kim discloses the display device comprising the use of subsidiary conductive pads (see at least [0025], [0029]).

Kim discloses the gate line and the data line having a double-layered structure (e.g., aluminum-based layer, see at least [0024]).

The use of an etch stopper/preventive layer is common and known in the art for achieving advantages such as preventing undesirable-etching regions (e.g., substrate, semiconductor

Art Unit: 2871

region). Therefore, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ an etch stopper/preventive layer, as common and known in the art for achieving advantages such as preventing undesirable-etching regions (e.g., substrate, semiconductor region).

Conclusion

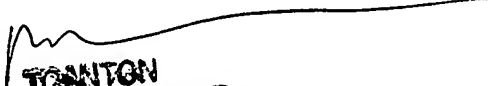
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 3, 2006


**TOANTON
PRIMARY EXAMINER**